

# Freshwater Fisheries Monthly Report – May 2020

## Stock Assessment

Brook Trout Program, Western Region I, and Trout Unlimited biologists participated in a Google Hangouts meeting to discuss fish population sampling on projects of mutual interest. These projects include pre and post sampling of livestock exclusion fencing projects on the North Fork of Crabtree Creek, a tributary to Mud Lick, and a tributary to Maple Lick, all in the Savage River watershed. Fish population sampling is also needed upstream and downstream of two stream blockage removal projects in Sand Spring Run and in Wolf Den Run as part of the grant agreements.



*Trout Unlimited and West I staff conducted pre livestock exclusion fencing fish sampling in the North Fork of Crabtree Creek in 2019. We collected blacknose dace, creek chub, and Blueridge sculpin, but no brook trout. We plan on sampling the station in 2020 after the stream's riparian zone has been protected for a year. We hope to find brook trout that have recolonized this restored section of the stream. Photo by A. Klotz.*

## Habitat and Water Quality

**Environmental review** - Provided aquatic resource information for the following project:

- State Highway Administration application for a culvert replacement over a tributary to the North Branch Potomac River in Allegany County. This project is intended to line the existing culvert and to do a partial replacement on the downstream end. Recommendations were given for Use III-P stream protections to ensure the construction has no negative impacts on the stream. Also recommended that all required mitigation is completed after construction to ensure quality habitat and no fish passage problems occur.
- A time-of-year restriction waiver request from State Highway Administration for a temporary stream diversion in an unnamed tributary to the Youghiogheny River as part of the Rt. 39 Bridge Replacement Project in Crellin. The project is currently under construction and a modification is requested to allow one week for the installation of a

diversion in an intermittent stream. This will allow erosion and sedimentation control, clearing and grubbing and roadway grading to occur, while maintaining the water quality of flow into the Youghiogheny River. On-site inspection of the intermittent stream determined it was a road-side ditch waterway with no fish life, so we agreed to the waiver request.

- Reviewed and commented on the fourth Mine Branch Stream restoration project.
- Corresponded with Department of Environment (MDE) on fingerling trout stocking history for Patapsco watershed
- Conference call with the department's Environmental Review Program and MDE staff to discuss better ways to process stream restoration projects.
- Commented on Rt. 27 outfall project in Manchester (Carroll County).
- Initial analysis of temperature data examining the influence of small ponds on stream temperature in coldwater watersheds. The report is posted on the Freshwater Fisheries Program webpage.
- Reviewed and approved one scientific collection permit.

**Land Stewardship Committee** - Provided supportive comments on two potential land acquisitions in Allegany County including a 403.82 acre parcel adjoining Dan's Mountain Wildlife Management Area and a 47.8 acre parcel adjoining Warrior Mountain Wildlife Management Area. Both parcels include Use-III tributary streams to the North Branch Potomac River. The Freshwater Fisheries Program fully supports these potential state acquisitions as they will provide for long term water quality protection in the upper Potomac River watershed.

**Deep Creek Lake** - Coordinated with staff from Deep Creek Lake State Park to provide information on submerged aquatic vegetation (SAV) and discuss treatment plans. Biologists provided Park Service staff with a fish species list and the life history of young of year fish the state park divers may observe while conducting SAV transects in the lake.

Staff participated in a video conference with Morgan State University researchers and Maryland Department of the Environment, Abandoned Mine Lands Division personnel to discuss the economic impact of acid mine drainage remediation projects and the resulting value of recreational trout fishing. Fish survey data pre and post acid mine drainage treatment on Chub Run in the Youghiogheny River watershed was provided for inclusion in the research report.



*Chub Run pre and post acid mine drainage treatment. The presence of brook trout was documented after the treatment project was completed. Photos by A.Klotz and K. Wampler.*

**Herrington Creek Liming** - The Maryland Park Service purchased 12 tons of limestone sand and had it deposited into Herrington Creek upstream of Herrington Manor Lake using money from the [State Lakes Protection and Restoration Fund](#). Water quality analysis in March showed the stream was acidic with very low alkalinity. The Freshwater Fisheries Program had been funding the liming project to help improve water quality and the fisheries in Herrington Manor Lake since the 1990s.



*Limestone fines being deposited in Herrington Creek to improve water quality. Photo by A. Klotz.*

**Stream Restoration** - A time-of-year waiver was received for large stream restoration projects on Little Elk Creek and Little Northeast Creek in Cecil County to repair storm damage to the recently completed projects. A five-year storm event caused extensive damage and erosion to areas that were already completed. The damage left sections of the stream in a more unstable condition and more susceptible to erosion than prior to the project's start. Staff recommended that repairs be completed and the site stabilized as soon as possible. The hope is this event will create new discussions among agencies and private contractors that will help to prevent this in the future.



*Unstable, eroded banks of Little Elk Creek.*

**Reef Ball Habitat** - Staff completed a scope of work for a Memorandum of Understanding (MOU) with the department's Resource Assessment Service to purchase reef ball molds for a habitat project in St. Mary's Lake. Funding for the work is being provided by the State Lakes Protection and Restoration Fund. Concrete is poured into the reef ball molds and left to cure. The mold is then disassembled leaving a hollow concrete form that provides very good, lasting fish habitat. Staff also assisted with the procurement of supplies for a similar project at Deep Creek Lake that is being completed by the Maryland Park Service.

## **Stocking and Population Management**

**Hybrid Striped Bass** - Broadford Lake received 100 hybrid striped bass fingerlings (average size four inches) from the cooperative Department of Juvenile Services (DJS) aquaculture project. DJS also supplied 500 hybrid sunfish juveniles averaging three inches that were stocked in the Battie Mixon Fishing Hole. Bear Creek hatchery staff stocked these fish during April.

**Trout** - Western Region assisted Bear Creek Hatchery with another round of trout stocking as part of the spring stocking program. Central Region concluded the spring trout stocking season by assisting Albert Powell and Unicorn Hatchery with stocking of rainbow and golden rainbow trout into lakes, ponds, and streams. Southern region also stocked approximately 1,000 rainbow trout into Lake Artemesia (Prince George's County). This was the final spring stocking event in the southern portion of the state and provided anglers a much needed respite during the month of May.

**Smallmouth Bass** - After successfully spawning on prepared nesting boxes at the Manning Warmwater hatchery, 36 healthy brood smallmouth bass were returned to the nontidal Potomac River by hatchery staff. These fish were collected from the river by Freshwater Fisheries personnel and transported to the hatchery.

**Pond Stocking Permits** - Seven pond stocking permits and one new fish supplier permit were issued for May.

## Outreach

**Customer Service** - Provided information for inquiries regarding:

- Information on trout stocking locations and tackle recommendations for trout fishing.
- Tips for anglers fishing Deep Creek Lake.
- A complaint of possible daily creel and possession limits being exceeded by an angler frequenting Bear Creek.
- Lack of trout stocking in New Germany Lake this spring because of crowding and safety concerns due to the COVID-19 pandemic.
- Lack of stocking in North Branch Potomac River delayed harvest trout fishing area this spring due to COVID-19; and questions regarding guiding on the North Branch Potomac River.
- Technical assistance on calls with three pond owners.
- Angler inquiries regarding Potomac River fishing conditions and the timing of smallmouth bass spawning.

Western Region biologist conducted a stream ecology lesson for his two sons as part of their new homeschooling curriculum. The demonstration was given on Wampler Run where the family resides. Wampler Run has a great aquatic invertebrate community and supports a wild brook trout population.

Staff provided two reports to the department's Anglers Log from recent fishing outings to encourage folks to enjoy fishing while practicing safe social distancing.



*Successful fishing trip at the head of Youghiogheny Lake!  
Photo courtesy of K. Wampler.*

**Southern Region Fishing** - Designed a pamphlet describing freshwater fishing in southern Maryland (Anne Arundel, Calvert, Charles, Prince George's, and St. Mary's counties). The document targets families and highlights locations with amenities such as easy access, picnic areas, and playgrounds. The document is currently under review and should be available to the public in the near future.

## **Angler Access**

Provided fishing regulation informational signs to the Potomac-Garrett State Forest staff for placement on kiosks near angler access areas throughout the forest.

Worked with Savage River State Forest Manager and Land Acquisition and Planning staff regarding an angler access issue along the Lower Savage River. A roadside pull-off was blocked with boulders several years ago by the private property owner, and a concerned angler questioned the ownership of the property. The State determined the property in question was not on state land and the private property owner did not encroach on state land.

## **Invasive Species**

**Northern Snakehead** - Eastern Regional Freshwater Fisheries will be on the lookout for northern snakeheads during their sampling of Conowingo Reservoir this summer and beyond. The Conowingo Dam fish lift was not operational most of the spring, but did operate for a few days in mid-May. Unfortunately, operators were unable to successfully exclude all the northern snakeheads that entered the lift, and twenty-one snakeheads were passed upstream into Conowingo Reservoir. There have been reports of angler caught northern snakeheads above Conowingo Dam, however they have not been substantiated. Last week, two adult snakeheads were caught by electrofishing the warm-water discharge from the Peach Bottom Nuclear Power Plant located on Conowingo Reservoir. One individual was collected by Pennsylvania Fish and Boat Commission biologists, and another was collected by an environmental consulting company. Maryland Freshwater Fisheries staff will be conducting their annual electrofishing survey of Conowingo Reservoir beginning in June.

Developed social media to reach out to recreational anglers for information on catch rates of northern snakehead in the Blackwater River drainage.

**Blue Catfish** - Biologists continued work on examining stomachs of invasive blue catfish from the tidal, freshwater Patuxent River (Anne Arundel, Charles, Prince George's, and Calvert counties). The work is part of a larger, cooperative project that aims to learn about the fish's food habits, movement, and habitat preferences in Maryland's tidal rivers. During the recent spring sampling period, 529 fish were examined and nearly 200 contained prey items to identify. White perch was the most common food item by far, with nearly half of stomachs with contents containing the fish. Only one blue catfish was confirmed to have preyed on blueback herring, though more may be identified through DNA analysis performed by the Leetown Science Center (U.S. Geological Survey, West Virginia).

Refined a management strategy for addressing invasive catfishes in Maryland that will be implemented as part of a draft fishery management plan (FMP) for catfishes.

## **Brook Trout Program**

Continued work on the Maryland Statewide Brook Trout Patch Resiliency Population Rating Criteria Assessment document. This will be a manuscript describing the rationale, methods, results, and application of the new brook trout patch rating system. This is an integral part of revamping the current brook trout fisheries management plan into a new statewide brook trout conservation plan. Work included developing individual descriptions for each current Level 1 patch, developing a comprehensive table that contains needed information for all patches, and continuing spatial analysis on habitat conditions in the patch.

Initiated planning and discussions for resuming brook trout sampling needs this summer. We plan to begin sampling in June.

Participated on a conference call with Trout Unlimited to provide information and assistance for several grant proposals and to discuss sampling needs and timing for existing grants at Wolfden and Sand Spring runs.

Participated in the annual Southern Division of the American Fisheries Society Trout Committee meeting that was held online this year.

Participated with American Fisheries Society online fisheries presentations, performed literature searches, and participated with University of Maryland Center for Environmental Science Appalachian Lab lab online seminar series and staff discussions.

## **Tidal Bass Program**

Black bass tournament permits were revised to include best management practices for assuring public health and minimize spread of coronavirus during the COVID-19 pandemic.

Staff participated in meetings with the Boat Act Advisory Committee and anglers to examine speed limit restrictions on Gunpowder River and associated with Day's Cove.

## **Other**

Staff continues to conduct daily tasks related to their job duties and functions of Fishing and Boating Services. Items consist of:

- Working with Information and Technology to further improve our equipment to telework more efficiently.
- Housekeeping tasks related to stored files and documents.
- Review of literature with regard to relevant regional topics including Deep Creek Lake submerged aquatic vegetation and treatment plan, management strategies to improve fishing in ponds and small impoundments.
- Participating in online fisheries training opportunities.